

<b>RTIP ID#</b> <i>(required)</i> 20020812				
<b>Project Description</b> <i>(clearly describe project)</i> Interstate 10 (I-10) at Cherry Avenue interchange. Interchange reconstruction. Widen interchange from Slover Avenue to Valley Boulevard from 4 to 6 lanes with double left turn lanes to ramps.				
<b>Type of Project</b> <i>(use Table 1 on instruction sheet)</i> Reconfigure existing interchange				
<b>County</b> San Bernardino	<b>Narrative Location/Route &amp; Postmiles</b> 08-SBD-10 PM12.5-13.8  <b>Caltrans Projects – EA#</b> 468000			
<b>Lead Agency:</b> County of San Bernardino				
<b>Contact Person</b> Chris Saed	<b>Phone#</b> (909)387-7877	<b>Fax#</b> (909)387-7877	<b>Email</b> csaed@dpw.sbcounty.gov	
<b>Hot Spot Pollutant of Concern</b> <i>(check one or both)</i> <b>PM2.5</b> x <b>PM10</b> x				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>				
<b>Categorical Exclusion (NEPA)</b>	x <b>EA or Draft EIS</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>	<b>Other</b>
<b>Scheduled Date of Federal Action:</b>				
<b>Current Programming Dates</b> <i>as appropriate</i>				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	07/09/2002	08/01/2007	08/01/2007	01/10/2009
<b>End</b>	07/26/2007	09/01/2008	09/01/2008	01/10/2011
<b>Project Purpose and Need (Summary):</b> <i>(attach additional sheets as necessary)</i>  <p>The purpose of the project is to improve the operation of the existing interchange and local circulation, enhance safety, alleviate existing level of service deficiencies, and accommodate projected future traffic volumes within the project vicinity.</p> <p>The proposed improvements are needed to alleviate existing traffic congestion and accommodate projected future traffic volumes at the Cherry Avenue/I-10 interchange. The primary geometric constraint at the interchange is the short reversing left turn pockets to the eastbound and westbound on-ramps. The Cherry Avenue interchange is used heavily by trucks, and these left turn pockets can only accommodate one truck. As a result, vehicles queuing beyond the left turn pockets block the adjacent through lanes on Cherry Avenue. Additionally, the off-ramps frequently queue beyond the mainline exit nose due to an insufficient number of lanes on each off-ramp and inadequate capacity through the ramp intersections. The main reasons for the existing operational deficiencies are heavy truck volumes and the previously mentioned geometric constraints. The heavy truck volumes at the interchange are a result of significant industrial uses in the City, the two truck stops, and the truck repair businesses located adjacent to the interchange.</p>				

<p><b>Surrounding Land Use/Traffic Generators</b> <i>(especially effect on diesel traffic)</i></p> <p>The surrounding land uses consist primarily of truck stops, truck repair facilities, and industrial uses.</p>
<p><b>Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility</b></p> <p>LOS F, Total AADT = 220,000*, Truck AADT = 21,208* (9.64%), Year 2004, Along I-10</p> <p>* These traffic volumes apply to both the No Build and Build Alternatives.</p>
<p><b>RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility</b></p> <p>LOS F, Total AADT = 276,740*, Truck AADT = 26,678* (9.64%), Year 2030, Along I-10</p>
<p><b>Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT</b></p> <p>LOS F, Total AADT = 23,100, Truck AADT = 2,772 (12%), Year 2003 No Build (Alt 1), Along Cherry Avenue</p> <p><b>RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT</b></p> <p>LOS F, Total AADT = 27,700, Truck AADT = 3,324 (12%), Year 2030 No Build (Alt 1), Along Cherry Avenue          LOS C, Total AADT = 39,800, Truck AADT = 4,776 (12 %), Year 2030 Alt 2, Along Cherry Avenue          LOS C, Total AADT = 39,800, Truck AADT = 4,776 (12 %), Year 2030 Alt 3, Along Cherry Avenue</p>
<p><b>Describe potential traffic redistribution effects of congestion relief</b> <i>(impact on other facilities)</i></p> <p>See attached analysis</p>
<p><b>Comments/Explanation/Details</b> <i>(attach additional sheets as necessary)</i></p> <p>See attached analysis</p>

## Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>) Analysis

The proposed project is within a nonattainment area for federal PM<sub>2.5</sub> and PM<sub>10</sub> standards. Therefore, per 40 CFR Part 93 analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

- i. The proposed project is not a new or expanded highway project. The proposed project is an interchange reconstruction project that does not increase the capacity of I-10. This type of project improves freeway interchange operations by reducing traffic congestion and improving merge operations. Based on the *Traffic Analysis* (Meyer, Mohaddes Associates, October 2005), the proposed project would increase the capacity of Cherry Avenue. However, the traffic volumes along Cherry Avenue would not exceed the 125,000 average daily trips threshold for a POAQC. In addition, although the truck traffic percentage would exceed eight percent the total truck ADT would remain below the 10,000 vehicle threshold for POAQC. The future traffic volumes along Cherry Avenue are shown in Table A.
- ii. The proposed project does not affect intersections that are at level of service (LOS) D, E, or F with a significant number of diesel vehicles. Based on the *Traffic Analysis*, the proposed project would reduce the delay and improve the LOS at intersections within the project vicinity. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables B, C, and D.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not expand an existing bus or rail terminal.

**Table A: 2030 Average Daily Traffic Volumes (AADT/ Truck AADT)**

Roadway Link	Without Project Traffic Volumes	Alternative 2 Traffic Volumes	Alternative 3 Traffic Volumes
Cherry Avenue north of Valley Boulevard	23,600 / 2,832	29,900 / 3,588	29,900 / 3,588
Cherry Avenue between Valley Boulevard and Westbound I-10 Ramps	27,400 / 3,288	34,200 / 4,104	34,200 / 4,104
Cherry Avenue between Westbound I-10 Ramps and Eastbound I-10 Ramps	27,700 / 3,324	38,400 / 4,608	38,400 / 4,608
Cherry Avenue between Eastbound I-10 Ramps and Slover Avenue	21,300 / 2,556	39,800 / 4,776	39,800 / 4,776
Cherry Avenue South of Slover Avenue	10,000 / 1,200	32,100 / 3,852	32,100 / 3,852

Source: Meyer, Mohaddes Associates., October 2005.

**Table B: 2030 without Project (Alternative 1) Intersection Levels of Service**

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cherry Avenue/Valley Boulevard	0.96	45.4	D	1.16	83.8	F
2.	Cherry Avenue/I-10 WB Ramps	1.29	90.5	F	1.31	108.9	F
3.	Cherry Avenue/I-10 EB Ramps	1.67	184.0	F	1.32	105.0	F
4.	Cherry Avenue/Slover Avenue	0.92	37.1	D	0.85	34.3	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

**Table C: 2030 with Proposed Project (Alternative 2) Intersection Levels of Service**

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cherry Avenue/Valley Boulevard	0.74	29.7	C	0.83	34.0	C
2.	Cherry Avenue/I-10 WB Ramps	0.78	25.5	C	0.61	19.9	B
3.	Cherry Avenue/I-10 EB Ramps	0.62	17.1	B	0.84	24.0	C
4.	Cherry Avenue/Slover Avenue	0.77	21.6	C	0.86	30.8	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

**Table D: 2030 with Proposed Project (Alternative 3) Intersection Levels of Service**

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cherry Avenue/Valley Boulevard	0.74	29.7	C	0.83	34.0	C
2.	Cherry Avenue/I-10 WB Ramps	0.63	17.8	B	0.50	14.1	B
3.	Cherry Avenue/I-10 EB Ramps	0.62	17.1	B	0.84	24.0	C
4.	Cherry Avenue/Slover Avenue	0.77	21.6	C	0.86	30.8	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM<sub>10</sub> or PM<sub>2.5</sub> violation.